

STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES

Matt Blunt, Governor • Doyle Childers, Director

www.dnr.mo.gov

MAY 25 2006

Mr. John DeLashmit
U.S. Environmental Protection Agency
Region VII
901 North Fifth Street
Kansas City, KS 66101

RE: Permit for Rolla Southwest Wastewater Treatment Plant in Lieu of Total Maximum Daily Load for Little Beaver Creek

Dear Mr. DeLashmit:

Little Beaver Creek (WBID 1529) near Rolla in Phelps County, Missouri is on the 2002 303(d) list for Volatile Suspended Solids (VSS). The sole source of this impairment is the Rolla Southwest Wastewater Treatment Plant (WWTP), Permit Number MO-0047023. The Missouri Department of Natural Resources (the department) proposes to correct this impairment through permit limits in lieu of a Total Maximum Daily Load (TMDL).

The department placed Little Beaver Creek on the 1998 303(d) list for Non-Filterable Residue. The department later changed the listing to VSS in 2002 to reflect impairment from a WWTP. All four miles of the classified portion are Class C and the WWTP is about halfway up the stream from its mouth. The listing for the impaired reach was based on five samples collected immediately downstream of the plant from July 28, 1982 through August 4, 1993. Department personnel observed violations of narrative standards for VSS directly downstream and attributable to the WWTP on July 28, 1982, August 16, 1983, August 27, 1991 and September 5, 1992. The department concludes that the WWTP is the sole source based on the following information:

- The 2003 water quality data show three samples taken on three days 0.1 mile upstream of the outfall. Two of the samples were non-detect for VSS and one was 26 mg/L.
- A visual stream survey in 2000 reported "water clear, substrate clean, good invertebrate diversity" at the same site upstream, and "heavy algae growth and organic solids deposits" 0.1 mile downstream of the plant.

The department has issued a new permit with limits that will ensure compliance with stream water quality standards. The secondary treatment effluent limitations for Biochemical Oxygen Demand₅ (BOD) and Total Suspended Solids (TSS) in the previous permit were not protective, therefore the new permit contains water quality based effluent limits. Wasteload allocations derived from a steady-state water quality model (QUAL2E) result in effluent limitations between secondary and advanced treatment technology based limits. In order to establish an implicit margin of safety and allow the receiving stream to attain applicable narrative and numeric criteria, the department placed advanced treatment technology-based effluent limitations in the Missouri State Operating Permit. The City of Rolla will achieve the VSS standard in Little Beaver Creek (as a narrative of no noticeable downstream objectionable deposits) by limiting the effluent to a BOD of 15 mg/L weekly average and 10 mg/L monthly average and TSS of 20 mg/L weekly average and 15 mg/L monthly average. The previous permit had limits of a BOD of 45 mg/L weekly average and 30 mg/L monthly average and TSS of 45 mg/L weekly average and 30 mg/l monthly average.

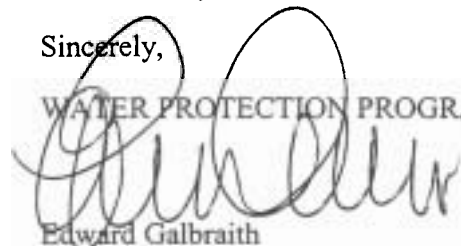
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Rolla's Southwest WWTP permit expired on August 10, 2005. The City of Rolla passed a \$3,000,000 bond issue in April, 2006 and is designing a new WWTP. The permit includes a compliance schedule which ensures that the new effluent limits will be achieved by December 1, 2007.

Enclosed please find the Missouri State Operating Permit for the Rolla Southwest WWTP. The department will schedule ambient stream monitoring to determine if the new permit limits have eliminated the impairment. In addition, the permit includes monthly instream monitoring to ensure Little Beaver Creek is achieving water quality standards. The permit includes a reopener clause to allow for stricter limits if monitoring shows water quality standard violations.

With this letter, the department submits the Rolla Southwest WWTP permit to the U.S. EPA for concurrence that the permit will serve in lieu of a TMDL. We appreciate EPA taking prompt action on this. If you have any questions, please contact Mr. Philip Schroeder of my staff at (573) 751-6623 or by mail at Missouri Department of Natural Resources, Water Protection Program, P.O. Box 176, Jefferson City, Missouri 65102-0176.

Sincerely,


WATER PROTECTION PROGRAM
Edward Galbraith
Director

EG:acl

Enclosure

c: Mr. William Bryan, Attorney General's Office
Mr. Daniel R. Schuette, Director, DEQ
Mr. Earl Pabst, Deputy Director, DEQ
Missouri Clean Water Commission